- (C) in section 304 (21 U.S.C. 824), by striking "303(g)(1)" each place it appears and inserting "303(h)(1)";
- (D) in section 307(d)(2) (21 U.S.C. 827(d)(2)), by striking "303(f)" and inserting "303(g)";
- (E) in section 309A(a)(2) (21 U.S.C. 829a(a)(2)), in the matter preceding subparagraph (A), by striking "303(g)(2)" and inserting "303(h)(2)";
- (F) in section 311(h) (21 U.S.C. 831(h)), by striking "303(f)" each place it appears and inserting "303(g)";
- (G) in section 401(h)(2) (21 U.S.C. 841(h)(2)), by striking "303(f)" each place it appears and inserting "303(g)";
- (H) in section 403(c)(2)(B) (21 U.S.C. 843(c)(2)(B)), by striking "303(f)" and inserting "303(g)"; and
- (I) in section 512(c)(1) (21 U.S.C. 882(c)(1)) by striking "303(f)" and inserting "303(g)".
- (2) Section 1008(c) of the Controlled Substances Import and Export Act (21 U.S.C. 958(c)) is amended—
- (A) in paragraph (1), by striking "303(d)" and inserting "303(e)"; and
- (B) in paragraph (2)(B), by striking "303(h)" and inserting "303(i)".
- (3) Title V of the Public Health Service Act (42 U.S.C. 290aa et seq.) is amended—
- (A) in section $520\bar{E}\!\!-\!\!4(c)$ (42 U.S.C. 290bb–36d(c)), by striking "303(g)(2)(B)" and inserting "303(h)(2)(B)"; and
- (B) in section 544(a)(3) (42 U.S.C. 290dd-3(a)(3)), by striking "303(g)" and inserting "303(h)".
- (4) Title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.) is amended—
- (A) in section 1833(bb)(3)(B) (42 U.S.C. 13951(bb)(3)(B)), by striking "303(g)" and inserting "303(h)":
- (B) in section 1834(o)(3)(C)(ii) (42 U.S.C. 1395m(o)(3)(C)(ii)), by striking "303(g)" and inserting "303(h)"; and
- (C) in section 1866F(c)(3)(C) (42 U.S.C. 1395cc-6(c)(3)(C)), by striking "303(g)" and inserting "303(h)".
- (5) Section 1903(aa)(2)(C)(ii) of the Social Security Act (42 U.S.C. 1396b(aa)(2)(C)(ii)) is amended by striking "303(g)" each place it appears and inserting "303(h)".

SEC. 5124. ADEQUATE AND UNINTERRUPTED SUPPLY.

On an annual basis, the Attorney General shall assess whether there is an adequate and uninterrupted supply of marihuana, including of specific strains, for research purposes.

SEC. 5125. SECURITY REQUIREMENTS.

- (a) IN GENERAL.—An individual or entity engaged in researching marihuana or its components shall store it in a securely locked, substantially constructed cabinet.
- (b) REQUIREMENTS FOR OTHER MEASURES.—Any other security measures required by the Attorney General to safeguard against diversion shall be consistent with those required for practitioners conducting research on other controlled substances in schedules I and II in section 202(c) of the Controlled Substances Act (21 U.S.C. 812(c)) that have a similar risk of diversion and abuse.

SEC. 5126. PROHIBITION AGAINST REINSTATING INTERDISCIPLINARY REVIEW PROCESS FOR NON-NIH-FUNDED RESEARCHERS.

The Secretary of Health and Human Services may not—

- (1) reinstate the Public Health Service interdisciplinary review process described in the guidance entitled "Guidance on Procedures for the Provision of Marijuana for Medical Research" (issued on May 21, 1999); or
- (2) require another review of scientific protocols that is applicable only to research on marihuana or its components.

TITLE LII—DEVELOPMENT OF FDA-AP-PROVED DRUGS USING CANNABIDIOL AND MARIHUANA

SEC. 5141. MEDICAL RESEARCH ON CANNABIDIOL.

Notwithstanding any provision of the Controlled Substances Act (21 U.S.C. 801 et seq.), the Safe and Drug-Free Schools and Communities Act (20 U.S.C. 7101 et seq.), chapter 81 of title 41, United States Code, or any other Federal law, an appropriately registered covered institution of higher education, a practitioner, or a manufacturer may manufacture, distribute, dispense, or possess marihuana or cannabidiol if the marihuana or cannabidiol is manufactured, distributed, dispensed, or possessed, respectively, for purposes of medical research for drug development or subsequent commercial production in accordance with section 5142.

SEC. 5142. REGISTRATION FOR THE COMMERCIAL PRODUCTION AND DISTRIBUTION OF FOOD AND DRUG ADMINISTRATION-APPROVED DRUGS.

The Attorney General shall register an applicant to manufacture or distribute cannabidiol or marihuana for the purpose of commercial production of a drug containing or derived from marihuana that is approved by the Secretary of Health and Human Services under section 505 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355), in accordance with the applicable requirements under subsection (a) or (b) of section 303 of the Controlled Substances Act (21 U.S.C. 823)

SEC. 5143. IMPORTATION OF CANNABIDIOL FOR RESEARCH PURPOSES.

The Controlled Substances Import and Export Act (21 U.S.C. 951 et seq.) is amended—

- (1) in section 1002(a) (21 U.S.C. 952(a))— (A) in paragraph (1), by striking "and" at
- the end;
 (B) in paragraph (2)(C), by inserting "and" after "uses,": and
- (C) inserting before the undesignated matter following paragraph (2)(C) the following:
- "(3) such amounts of marihuana or cannabidiol (as defined in section 5102 of the Cannabidiol and Marihuana Research Expansion Act) as are—
- "(A) approved for medical research for drug development (as such terms are defined in section 5102 of the Cannabidiol and Marihuana Research Expansion Act), or
- "(B) necessary for registered manufacturers to manufacture drugs containing marihuana or cannabidiol that have been approved for use by the Commissioner of Food and Drugs under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seg.).": and
- (2) in section 1007 (21 U.S.C. 957), by amending subsection (a) to read as follows:
- "(a)(1) Except as provided in paragraph (2), no person may—
- "(A) import into the customs territory of the United States from any place outside thereof (but within the United States), or import into the United States from any place outside thereof, any controlled substance or list I chemical. or
- "(B) export from the United States any controlled substance or list I chemical,
- unless there is in effect with respect to such person a registration issued by the Attorney General under section 1008, or unless such person is exempt from registration under subsection (b).
- "(2) Paragraph (1) shall not apply to the import or export of marihuana or cannabidiol (as defined in section 5102 of the Cannabidiol and Marihuana Research Expansion Act) that has been approved for—
- "(A) medical research for drug development authorized under section 5141 of the Cannabidiol and Marihuana Research Expansion Act; or

"(B) use by registered manufacturers to manufacture drugs containing marihuana or cannabidiol that have been approved for use by the Commissioner of Food and Drugs under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.).".

TITLE LIII—DOCTOR-PATIENT RELATIONSHIP

SEC. 5161. DOCTOR-PATIENT RELATIONSHIP.

It shall not be a violation of the Controlled Substances Act (21 U.S.C. 801 et seq.) for a State-licensed physician to discuss—

- (1) the currently known potential harms and benefits of marihuana derivatives, including cannabidiol, as a treatment with the legal guardian of the patient of the physician if the patient is a child; or
- (2) the currently known potential harms and benefits of marihuana and marihuana derivatives, including cannabidiol, as a treatment with the patient or the legal guardian of the patient of the physician if the patient is a legal adult.

TITLE LIV—FEDERAL RESEARCH

SEC. 5181. FEDERAL RESEARCH.

- (a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary of Health and Human Services, in coordination with the Director of the National Institutes of Health and the heads of other relevant Federal agencies, shall submit to the Caucus on International Narcotics Control, the Committee on the Judiciary, and the Committee on Health, Education, Labor, and Pensions of the Senate and the Committee on Energy and Commerce and the Committee on the Judiciary of the House of Representatives a report on—
- (1) the potential therapeutic effects of cannabidiol or marihuana on serious medical conditions, including intractable epilepsy;
- (2) the potential effects of marihuana, including—
- (A) the effect of increasing delta-9tetrahydrocannabinol levels on the human body and developing adolescent brains; and
- (B) the effect of various delta-9tetrahydrocannabinol levels on cognitive abilities, such as those that are required to operate motor vehicles or other heavy equipment; and
- (3) the barriers associated with researching marihuana or cannabidiol in States that have legalized the use of such substances, which shall include—
- (A) recommendations as to how such barriers might be overcome, including whether public-private partnerships or Federal-State research partnerships may or should be implemented to provide researchers with access to additional strains of marihuana and cannabidiol; and
- (B) recommendations as to what safeguards must be in place to verify—
- (i) the levels of tetrahydrocannabinol, cannabidiol, or other cannabinoids contained in products obtained from such States is accurate: and
- (ii) that such products do not contain harmful or toxic components.
- (b) ACTIVITIES.—To the extent practicable, the Secretary of Health and Human Services, either directly or through awarding grants, contacts, or cooperative agreements, shall expand and coordinate the activities of the National Institutes of Health and other relevant Federal agencies to better determine the effects of cannabidiol and marihuana, as outlined in the report submitted under paragraphs (1) and (2) of subsection (a).

SA 4089. Mrs. FEINSTEIN (for herself and Mr. Padilla) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. Reed and intended to be proposed to

the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title X, add the following:

Section 714(a) of the California Desert Protection Act of 1994 (16 U.S.C. 410aaa–81c(a)) is amended by striking paragraph (3) and inserting the following:

- "(3) CONSERVATION LAND.—The term 'conservation land' means—
- "(A) any land within the Conservation Area that is designated to satisfy the conditions of a Federal habitat conservation plan, general conservation plan, or State natural communities conservation plan:
- "(B) any national conservation land within the Conservation Area established pursuant to section 2002(b)(2)(D) of the Omnibus Public Land Management Act of 2009 (16 U.S.C. 7202(b)(2)(D)); and
- "(C) any area of critical environmental concern within the Conservation Area established pursuant to section 202(c)(3) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712(c)(3))."

SA 4090. Mrs. FISCHER (for herself and Ms. Klobuchar) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. Reed and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title X, insert the following:

SEC. _____. ADVANCING IOT FOR PRECISION AGRICULTURE.

- (a) SHORT TITLE.—This section may be cited as the "Advancing IoT for Precision Agriculture Act of 2021".
- (b) PURPOSE.—It is the purpose of this section to promote scientific research and development opportunities for connected technologies that advance precision agriculture capabilities.
- (c) NATIONAL SCIENCE FOUNDATION DIRECTIVE ON AGRICULTURAL SENSOR RESEARCH.—
 In awarding grants under its sensor systems and networked systems programs, the Director of the National Science Foundation shall include in consideration of portfolio balance research and development on sensor connectivity in environments of intermittent connectivity and intermittent computation—
- (1) to improve the reliable use of advance sensing systems in rural and agricultural areas: and
- (2) that considers—
- (A) direct gateway access for locally stored data:
- (B) attenuation of signal transmission;
- (C) loss of signal transmission; and
- (D) at-scale performance for wireless power.
- (d) UPDATING CONSIDERATIONS FOR PRECISION AGRICULTURE TECHNOLOGY WITHIN THE

- NSF ADVANCED TECHNICAL EDUCATION PROGRAM.—Section 3 of the Scientific and Advanced-Technology Act of 1992 (42 U.S.C. 1862i) is amended—
 - (1) in subsection (d)(2)—
- (A) in subparagraph (D), by striking "and" after the semicolon;
- (B) in subparagraph (E), by striking the period at the end and inserting ''; and''; and
 - (C) by adding at the end the following:
- "(F) applications that incorporate distance learning tools and approaches.";
- (2) in subsection (e)(3)—
- (A) in subparagraph (C), by striking "and" after the semicolon;
- (B) in subparagraph (D), by striking the period at the end and inserting "; and"; and
- (C) by adding at the end the following: "(E) applications that incorporate distance
- "(E) applications that incorporate distance learning tools and approaches."; and
- (3) in subsection (j)(1), by inserting "agricultural," after "commercial,".
- (e) GAO REVIEW.—Not later than 18 months after the date of enactment of this section, the Comptroller General of the United States shall provide—
- (1) a technology assessment of precision agriculture technologies, such as the existing use of—
- (A) sensors, scanners, radio-frequency identification, and related technologies that can monitor soil properties, irrigation conditions, and plant physiology;
- (B) sensors, scanners, radio-frequency identification, and related technologies that can monitor livestock activity and health;
- (C) network connectivity and wireless communications that can securely support digital agriculture technologies in rural and remote areas:
- (D) aerial imagery generated by satellites or unmanned aerial vehicles;
 - (E) ground-based robotics:
- (F) control systems design and connectivity, such as smart irrigation control systems; and
- (G) data management software and advanced analytics that can assist decision making and improve agricultural outcomes; and
- (2) a review of Federal programs that provide support for precision agriculture research, development, adoption, education, or training, in existence on the date of enactment of this section.

SA 4091. Mr. DURBIN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

Strike sections 1031 through 1034 and insert the following:

SEC. 1031. PROHIBITION ON USE OF FUNDS TO OPERATE THE DETENTION FACILITY AT UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA, AFTER SEPTEMBER 30, 2023.

None of the funds authorized to be appropriated or otherwise made available by this Act or any other Act may be used to operate the detention facility at United States Naval Station, Guantanamo Bay, Cuba, after September 30, 2023.

SEC. 1032. REPEAL OF PROHIBITIONS RELATING TO DETAINEES AT UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA.

- (a) USE OF FUNDS FOR TRANSFER OR RELEASE OF INDIVIDUALS DETAINED AT UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA, TO THE UNITED STATES.—Section 1033 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232; 132 Stat. 1953), as most recently amended by section 1041 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283), is repealed.
- (b) USE OF FUNDS TO CONSTRUCT OR MODIFY FACILITIES IN THE UNITED STATES TO HOUSE DETAINES TRANSFERRED FROM UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA.—Section 1034 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232; 132 Stat. 1954), as most recently amended by section 1042 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283), is repealed.
- (c) USE OF FUNDS FOR TRANSFER OR RELEASE OF INDIVIDUALS DETAINED AT UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA, TO CERTAIN COUNTRIES.—Section 1035 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232; 132 Stat. 1954), as most recently amended by section 1043 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283), is repealed.

SEC. 1033. REPEAL OF CERTAIN REQUIREMENTS FOR CERTIFICATIONS AND NOTIFICATIONS RELATING TO TRANSFER OF DETAINEES AT UNITED STATES NAVAL STATION, GUANTANAMO BAY, CUBA, TO FOREIGN COUNTRIES AND OTHER FOREIGN ENTITIES.

- (a) CERTIFICATION.—Section 1034 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92; 129 Stat. 969; 10 U.S.C. 801 note) is repealed.
- (b) NOTIFICATION.—Section 308 of the Intelligence Authorization Act for Fiscal Year 2012 (Public Law 112-87; 125 Stat. 1883; 10 U.S.C. 801 note) is repealed.

SEC. 1034. REPEAL OF CHAPTER 47A OF TITLE 10, UNITED STATES CODE.

- (a) IN GENERAL.—Subchapters I through VI and subchapter VIII of chapter 47A of title 10, United States Code, are repealed.
- (b) CONFORMING AMENDMENTS TO SUB-CHAPTER VII.—Subchapter VII of chapter 47A of such title is amended—
- (1) in section 950d(a)(3), by inserting "(as in effect on the day before the date of the enactment of the National Defense Authorization Act for Fiscal Year 2022)" after "of this title":
 - (2) in section 950f—
 - (A) in subsection (b)-
- (i) in paragraph (2), by inserting "(as in effect on the day before the date of the enactment of the National Defense Authorization Act for Fiscal Year 2022)" after "of this title"; and
- (ii) in paragraph (6)(B), by striking "section 949b(b)(4) of this title" and inserting "paragraph (7)"; and
- (B) by adding at the end the following new paragraph:
- "(7) No appellate military judge on the United States Court of Military Commission Review may be reassigned to other duties, except under circumstances as follows:
- "(A) The appellate military judge voluntarily requests to be reassigned to other duties and the Secretary of Defense, or the designee of the Secretary, in consultation with the Judge Advocate General of the armed force of which the appellate military judge is a member, approves such reassignment.